

**REMARKS**

Claims 1-19 are pending in this application. By this Amendment, Fig. 6 is amended, as discussed below. Reconsideration is respectfully requested.

Applicants gratefully acknowledge the courtesies extended to Applicants' representative at the personal interview conducted on May 19, 2004. The substance of the interview is incorporated into the following remarks, which constitute Applicants' record of the interview.

The Office Action objects to Figure 6 for not being designated by a legend such as --Prior Art--. A replacement sheet is submitted herewith which designates Figure 6 as being prior art. Applicants respectfully request that the objection to the drawings be withdrawn.

The Office Action rejects claims 1-4 and 8-19 under 35 U.S.C. §102(b) over Ratnaparkhi ("A Maximum Entropy Model for Part-of-Speech Tagging," in Proceedings of the Conference on Empirical Methods and Natural Language Processing, pp. 133-142, 1966, hereinafter "Ratnaparkhi"). This rejection is respectfully traversed.

As argued during the personal interview, Applicants submit that Ratnaparkhi does not disclose "obtaining an identifier for the phrase, the identifier being associated with context information" or "supplementing the phrase with the context information" as recited in claim 1, and similarly recited in claims 14 and 15.

The Office Action asserts that "tags for each word - identifiers - are associated with context." However, the identifier recited in claim 1 is separate and distinct from the part of speech (POS) tag which is also recited as a feature of claim 1, i.e., "assigning the at least one POS - tag to the phrase based on the supplemented phrase." The Office Action fails to point out an identifier in Ratnaparkhi other than the part of speech tag that is associated with context information.

The Office Action then asserts that supplementing the phrase with context information is found on page 133, column 2, paragraph 2. The Office Action asserts that this passage discloses that "H is a set of possible word contexts where the context information is contained in separate-supplemental-corpus." Applicants respectfully disagree.

H is defined on page 133, column 2 of Ratnaparkhi as: "H is the set of possible word contexts or 'histories'... Given a sequence of words  $\{w_1, \dots, w_n\}$  and tags  $\{t_1, \dots, t_n\}$  as the training data, define  $h_i$  as the history available when predicting  $t_i$ ." The history  $h_i$  is further defined on page 134, column 2, as being comprised of the target word  $w_i$ , the preceding words  $w_{i-1}$ ,  $w_{i-2}$ , the subsequent words  $w_{i+1}$ ,  $w_{i+2}$ , and previous two tags  $t_{i-1}$ ,  $t_{i-2}$ , within the phrase:

$$h_i = \{w_i, w_{i+1}, w_{i+2}, w_{i-1}, w_{i-2}, t_{i-1}, t_{i-2}\}$$

Therefore, the context words come from the phrase itself, not from "a separate supplemental corpus."

For example, in attempting to tag the word "about" the previous two words "the" and "stories," and the subsequent two words "well-heeled" and "communities" are added to the word "about" to generate the history  $h_3$  shown in Table 3 of Ratnaparkhi, for tagging the word "about." However, each of these words came from the original phrase shown in Table 2: "the stories about well-heeled communities and developers." Nowhere in Ratnaparkhi is it disclosed or suggested that the phrase is supplemented with context information.

The law is clear that "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987) (emphasis added). The identical invention must be shown in as complete detail as is contained in the ...claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989) (emphasis added). Applicants submit

that Ratnaparkhi does not disclose or suggest each and every feature recited in independent claims 1, 14 and 15.

Claims 2-4 and 8-13 depend from claim 1, and claims 16-19 depend from claim 15. Therefore, claims 2-4, 8-13 and 16-19 are patentable for the reasons set forth above with respect to claims 1 and 15, as well as for the additional features they recite. Accordingly, Applicants respectfully request that the rejection of claims 1-4 and 8-19 under 35 U.S.C. §102(b), be withdrawn.

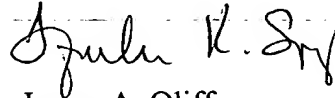
The Office Action rejects claims 5-7 under 35 U.S.C. §103(a) over Ratnaparkhi in view of Ratnaparkhi ("Learning to Parse Natural Language With Maximum Entropy Models," Machine Learning, pp. 151-175, February 1999, hereinafter referred to as "Ratnaparkhi-99"). This rejection is respectfully traversed.

Applicants submit that Ratnaparkhi-99 does not disclose or suggest "obtaining an identifier for the phrase, the identifier being associated with context information; supplementing the phrase with the context information." Therefore, Ratnaparkhi-99 does not remedy the deficiency of Ratnaparkhi with respect to claims 1, 14 and 15. Claims 5-7 depend from claim 1. Accordingly, Applicants respectfully request that the rejection of claims 5-7 under 35 U.S.C. §103(a) be withdrawn.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-19 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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Attachment:  
Replacement Sheet

Date: May 27, 2004

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